Title (en)

OPTICAL IMAGING SYSTEM USING LATERAL ILLUMINATION FOR DIGITAL ASSAYS

Title (de)

OPTISCHES BILDGEBUNGSSYSTEM MIT LATERALER BELEUCHTUNG FÜR DIGITALE TESTS

Title (fr)

SYSTÈME D'IMAGERIE OPTIQUE UTILISANT UN ÉCLAIRAGE LATÉRAL POUR DES DOSAGES NUMÉRIQUES

Publication

EP 3559640 A4 20200805 (EN)

Application

EP 17882684 A 20171220

Priority

- US 201662437534 P 20161221
- JP 2017045823 W 20171220

Abstract (en)

[origin: US2018172594A1] A compact optical imaging system including a single filter and a light source that provides lateral illumination for bead detection in digital assays. The light source is configured to emit light toward the detection vessel. The single filter is positioned to receive light reflected from a sample in the detection vessel, that originated from the light source, and receive an output from a sample in the detection vessel. A detector is configured to receive a portion of the reflected light and a portion of the output that passes through the single filter.

IPC 8 full level

G01N 21/64 (2006.01); **G01N 21/03** (2006.01); **G01N 21/51** (2006.01); **G01N 33/53** (2006.01)

CPC (source: EP US)

G01N 21/51 (2013.01 - EP US); **G01N 21/64** (2013.01 - US); **G01N 21/6428** (2013.01 - EP US); **G01N 21/645** (2013.01 - US); **G01N 21/6452** (2013.01 - EP US); **G01N 21/75** (2013.01 - US); **G01N 33/54366** (2013.01 - US); G01N 2201/0621 (2013.01 - US); G01N 2201/063 (2013.01 - EP US)

Citation (search report)

- [XI] US 2015355182 A1 20151210 - RISSIN DAVID M [US], et al
- [X] US 2012274760 A1 20121101 - KING FREDERICK DAVID [CA], et al
- See also references of WO 2018117191A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

US 10324041 B2 20190618; **US 2018172594 A1 20180621**; CN 110366677 A 20191022; EP 3559640 A1 20191030; EP 3559640 A4 20200805; JP 2020507744 A 20200312; JP 2022172287 A 20221115; JP 2024050633 A 20240410; JP 7425138 B2 20240130; US 11073481 B2 20210727; US 11635387 B2 20230425; US 2019376902 A1 20191212; US 2021349031 A1 20211111; WO 2018117191 A1 20180628

DOCDB simple family (application)

US 201715845754 A 20171218; CN 201780087035 A 20171220; EP 17882684 A 20171220; JP 2017045823 W 20171220; JP 2019533657 A 20171220; JP 2022140509 A 20220905; JP 2024005071 A 20240117; US 201916419952 A 20190522; US 202117385378 A 20210726